

Appendix A – Amended Claims

1 - 61 (canceled)

62. (currently amended) A herbicide-resistant rice plant produced by the process of Claim 71, wherein: ~~(a) the growth of said herbicide-resistant plant is resistant to inhibition by at least one herbicide that normally inhibits acetohydroxyacid synthase, at levels of the herbicide that would normally inhibit the growth of a rice plant; and~~

~~(b) said herbicide-resistant plant is a derivative of a rice plant obtained by exposing rice plants to mutation-inducing conditions; growing rice plants from the exposed plants, or growing rice plants from progeny of the exposed plants, in the presence of at least one herbicide that normally inhibits acetohydroxyacid synthase, at levels of the herbicide that would normally inhibit the growth of a rice plant; and selecting for further propagation rice plants that grow without significant injury in the presence of the herbicide; and~~

~~(c) said herbicide-resistant plant expresses a functional acetohydroxyacid synthase that is resistant to inhibition by at least one herbicide that normally inhibits acetohydroxyacid synthase, at levels of the herbicide that would normally inhibit the growth of a rice plant;~~

~~provided that excluded from the scope of this Claim is:~~

~~(d) a plant that is the plant with ATCC accession number 97523; and any mutant, recombinant, or genetically engineered derivative of the plant with ATCC accession number 97523 or of any progeny of the plant with ATCC accession number 97523; and any plant that is the progeny of any of these plants; wherein these derivatives of the plant with ATCC accession number 97523 that are excluded from the scope of this Claim are those that retain~~

~~the herbicide resistance characteristics of the plant with ATCC accession number 97523.~~

63. (original) A process for controlling weeds in the vicinity of a rice plant as recited in Claim 62, said process comprising applying a herbicide to the weeds and to the rice plant, wherein the herbicide normally inhibits acetohydroxyacid synthase, at levels of the herbicide that would normally inhibit the growth of a rice plant.

64. (previously presented) The rice plant recited in Claim 62, wherein the growth of said plant is resistant to inhibition by at least one imidazolinone herbicide that normally inhibits acetohydroxyacid synthase, at levels of the herbicide that would normally inhibit the growth of a rice plant.

65. (original) A process for controlling weeds in the vicinity of a rice plant as recited in Claim 64, said process comprising applying an imidazolinone herbicide to the weeds and to the rice plant, wherein the herbicide normally inhibits acetohydroxyacid synthase, at levels of the herbicide that would normally inhibit the growth of a rice plant.

66. (previously presented) The rice plant recited in Claim 62, wherein the growth of said plant is resistant to inhibition by at least one sulfonylurea herbicide that normally inhibits acetohydroxyacid synthase, at levels of the herbicide that would normally inhibit the growth of a rice plant.

67. (original) A process for controlling weeds in the vicinity of a rice plant as recited in Claim 66, said process comprising applying a sulfonylurea herbicide to the weeds and to the rice plant, wherein the herbicide normally inhibits acetohydroxyacid synthase, at levels of the herbicide that would normally inhibit the growth of a rice plant.

68. (previously presented) The rice plant recited in Claim 62, wherein the growth of said plant is resistant to inhibition by at least one herbicide selected from the group consisting of imazethapyr, imazapic, imazapyr, nicosulfuron, sulfometuron methyl, imazaquin, primisulfuron, imazamox, chlorimuron ethyl, metsulfuron methyl, rimsulfuron, thifensulfuron methyl, tribenuron methyl, and pyriithiobac sodium; at levels of the herbicide that would normally inhibit the growth of a rice plant.

69. (original) A process for controlling weeds in the vicinity of a rice plant as recited in Claim 68, said process comprising applying to the weeds and to the rice plant at least one herbicide selected from the group consisting of imazethapyr, imazapic, imazapyr, nicosulfuron, sulfometuron methyl, imazaquin, primisulfuron, imazamox, chlorimuron ethyl, metsulfuron methyl, rimsulfuron, thifensulfuron methyl, tribenuron methyl, and pyriithiobac sodium; at levels of the herbicide that would normally inhibit the growth of a rice plant.

70. (canceled)

71. (currently amended) A process for ~~imparting herbicide resistance to~~ breeding herbicide resistant rice plants, said process comprising the steps of:

(a) ~~exposing rice plants to mutation-inducing conditions;~~ crossing or back-crossing the rice plant having ATCC accession number PTA-904 with other rice germplasm;

(b) growing rice plants resulting from ~~the exposed plants, or growing rice plants from progeny of the exposed plants,~~ said crossing or back-crossing in the presence of at least one herbicide that normally inhibits acetohydroxyacid synthase, at levels of the herbicide that would normally inhibit the growth of a rice plant; and

(c) selecting for further propagation, as hybrids or as varieties, rice plants resulting from said crossing or back-crossing, wherein the rice plants selected are plants that grow without significant injury in the presence of the herbicide.

72. (previously presented) The process recited in Claim 71, wherein the herbicide is selected from the group consisting of imazethapyr, imazapic, and imazapyr.

73 - 81 (canceled)

82. (new) The process recited in Claim 71, wherein the herbicide is selected from the group consisting of imazamox and imazaquin.

83. (new) The process recited in Claim 71, wherein the herbicide is an imidazolinone.

84. (new) The process recited in Claim 71, wherein the herbicide is a sulfonylurea.